Camissonia pygmaea Dougl. ex Lehm. Raven

dwarf evening-primrose
Onagraceae (Evening-Primrose Family)

Status: State Sensitive

Rank: G3S3

General Description: Erect annual, ½ to 14 inches tall, often well branched at the base and above, usually not flowering near the base, pubescence villous and glandular; leaves very narrowly elliptic to narrowly ovate, the basal ones largest, \(\frac{3}{4} \) to 2\(\frac{1}{2} \) inches long, \(\frac{1}{4} \) to 1½ inch wide, often withered by the time of flowering, sparsely denticulate, the apex acuminate or acute, the base narrowly cuneate to attenuate; basal leaves with a petiole \(\frac{1}{8} \) to 2\(\frac{1}{2} \) inches long, the upper ones subsessile; inflorescences nodding before anthesis; hypanthium 1/16 to $\frac{1}{8}$ inch long, <1/16 inch across at the summit, villous in lower half within; sepals 1/16 inch long, <1/16 inch wide; petals 1/16 to ½ inch long, 1/16 inch wide; filaments of episepalous stamens 1/16 inch long, those of the epipetalous ones slightly shorter; anthers <1/16 inch long; style 3.2-4 mm long; stigma 0.5 to 0.8 mm across, surrounded by the anthers at anthesis; capsule slightly curved outward to contorted, 1/3 to 1½ inch long, 1/16 to 3/16 inch thick at the base, terete, held on the dried plant and shedding seeds tardily. Seeds dimorphic, the basal ones coarsely papillose.

Identification Tips: Camissonia pygmaea is most likely to be confused with other diminutive, white-flowered species of the genus that co-occur, namely *C. boothii* and *C. minor*. Characters that can be used to distinguish *C. minor* are the overall smaller size of the floral features, particularly the stigma. *C. pygmaea* can be distinguished from *C. boothii* by the former species' smaller floral size, stamens that are equal to, rather than less than, the style and stigma; and seeds on the lower part of the capsule strongly papillose and dark brown in color, while seeds of the upper portion of the capsule are nearly smooth and whitish in color as opposed to seeds that are generally all alike.

Phenology: Washington populations of *Camissonia pygmaea* flower during June. The flowering period is extended enough so that flowers and fruits have been observed on the same plant. Members of the genus generally open their flowers at sunrise. The species is recognizable between June and August.

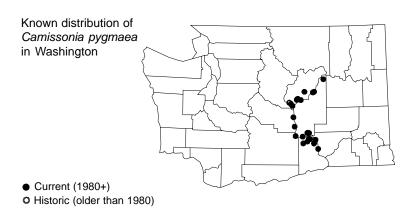
Range: Regional endemic known from eastern Washington (Benton, Douglas, Franklin, Grant, and Kittitas counties), eastern

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Oregon (Gilliam, Grant, Harney, and Wheeler counties), and Idaho (Jerome County). The range of *Camissonia pygmaea* is within the sagebrush-steppe zone of Franklin and Dyrness (1973). Elevation ranges from 500 to 1850 feet.

Habitat: Camissonia pygmaea is found on unstable soil or gravel in steep talus, dry washes, banks and roadcuts. Associated species include small-flowered gilia (Gilia minutiflora), threadleaf phacelia (Phacelia linearis), big sagebrush (Artemisia tridentata), bitterbrush (Purshia tridentata), bushy mentzelia (Mentzelia dispersa), winged cryptantha (Cryptantha pterocarya), Suksdorf's monkey-flower (Mimulus suksdorfii), and obscure evening-primrose (Camissonia andina).

Ecology: The taxon occurs in habitats that are maintained in an open condition by erosion and the generally harsh environment. Because of the unstable nature of the habitat, and the annual habit of the taxon, it is probable that the number, size and location of the populations varies from year to year.

State Status Comments: There are few known sites of the species in WA, many of which are small in size.

Inventory Needs: Additional inventory work should be conducted for the species on the Yakima Training Center and throughout its range.

Threats and Management Concerns: Threats to *Camissonia pygmaea* include resource extraction (gravel pits), road construction and herbicide drift. Invasion by non-native weedy species poses a threat in the future. Illegal ORV use and off-site irrigation threaten some of the sites.

Comments: Synonymous with *Oenothera pygmaea* Dougl.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1961. Vascular Plants of the Pacific Northwest, Part 3: Saxifragaceae to Ericaceae. University of Washington Press, Seattle. 614 pp.

Raven, P.H. 1969. A revision of the genus *Camissonia* (Onagraceae). Contributions from the U.S. National herbarium 375. 394 pp.

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